#### King Saud University College of Computer and Information Sciences Lab 8 Files



## Car

## *Car(m: String, y: String, p: double):* Constructor with parameters for make, year and price of the Car.

Car(car: Car): Copy constructor.

*setters/getters:* Setters and getters for Make, Year and Price.

# **Car Dealer**

**CarDealer(n: String, I: String, size: int):** Constructor with parameters for Name and Location for the CarDealer and the size for the Car array. The constructor throws a *NegativeArraySizeException* when the array is created with a negative size.

*addCar(car: Car):* Add a car to the CarDealer and return true if successfully added. Otherwise return false. The method throws an *ArrayOutOfBoundsException* when an illegal index term in the array has been accessed.

*save(fileName: String):* Save all the information of the CarDealer (name, location, and all the cars objects) to a file with the name fileName which is passed to this method. Also save the array size for recreation in the load method. This method will throw *IllegalArgumentException* when the method is passed an illegal value.

**load(fileName: String):** Load/read all the information of the CarDealer from the file with the specified name fileName to the object's attributes. This also requires creating appropriate size for the array before filling it with Car objects.

setters/getters: Setters and getters for name and location.

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Once you are done writing the classes, you need to test your work by implementing the class Lab9 with main method that shows the following menu:

### 1. Add new Car

Ask the user for Make, Year, and Price, and then add it to CarDealer.

2. Display all Cars
Display all Cars information.
3. Load from file
Ask the user for a filename, and then load from it.
4. Save to file
Ask the user for a filename, and then save to it.
5. Exit Program

## Blackboard submission:

Be advised that by not following the steps, grades will be deducted.

- Submit the .java files in a zip format.
   File -> Export -> General (archive file) -> select .java files from src folder and name the file Lab 9
- Submit screenshots of the actual run from the console.

## Helpful tips and hints:

- To auto generate Getters and setters go to Source -> Generate Getter and Setter
   Or just type set and press Ctrl + Space for the variable you just added.
- To invoke the Auto Formatter for your code : Ctrl + Shift + F
- For auto complete: Ctrl + space
- For System.*out*.println(): syso + Ctrl + space
- To Undo: Ctrl + z
- To Copy: Ctrl + c
- To Paste: Ctrl + v
- To Save: Ctrl + s
- - means private, + public, # protected.